

**LISTING OF THE CLAIMS:**

This listing of claims will replace all prior versions and listings of claims in the application:

1. (Previously Presented) A porous nano material polymer composite, wherein a polymer penetrates into nano pores of nano silica to form a network structure.
2. (Original) The porous nano material polymer composite according to claim 1, wherein the polymer is polymethyl methacrylate (PMMA).
3. (Previously Presented) A method of manufacturing porous nano material polymer composite, the method comprising, impregnating monomer in nanometer order holes of a porous nano material in supercritical carbon dioxide fluid, and polymerizing the monomer.
4. (Previously Presented) The porous nano material polymer composite of claim 1 or claim 2, wherein said nano silica is hydrophobic silica.
5. (Previously Presented) The porous nano material polymer composite according to claim 4, wherein said hydrophobic silica is silica treated with hexamethyldisilazane.
6. (Previously Presented) The method according to claim 3, wherein the polymer is polymethyl methacrylate (PMMA).
7. (Previously Presented) The method according to claim 3 or claim 6, wherein said porous nano material is hydrophobic silica.
8. (Previously Presented) The method according to claim 7, wherein said hydrophobic silica is nano silica treated with hexamethyldisilazane.